

Wetland Restoration...a rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable.



Wetland, photo courtesy USDA – Natural Resources Conservation Service

Purposes

The purpose of this practice is to restore wetland functions that occurred on the disturbed wetland site prior to modification through the restoration of hydric soil conditions, hydrologic conditions and hydrophytic plant communities, to the extent practicable.

Benefits

Renovating wetlands provides cover and habitat for wetland wildlife. In addition, it can also reduce flooding, provide offsite water quality benefits, and increase groundwater recharge.

Applications

This practice applies only to natural wetlands with hydric soil that have been hydrologically and/or vegetatively degraded. Where hydrology restoration is involved, this practice is applicable only if modifying drainage and/or artificial flooding can approximate natural hydrologic conditions. This practice does not apply to sites containing hazardous waste.

Design and Installation

Where wetlands have been drained and/or farmed, existing drainage systems will be utilized, removed, or modified as needed to achieve the intended purpose. In some cases, subsurface and surface drains are plugged or removed so water can refill the area. In other cases, low-lying areas are scraped to form a shallow basin, and dikes or embankments are installed to establish and maintain water levels. However, modifications to the existing drainage system should not adversely impact upstream, downstream, or adjacent landowners.

Vegetation at the site should be restored, as much as restored site conditions will allow, to the original plant community. Usually, the wetland can be revegetated from existing seed banks in the soil and by colonization from nearby wetland areas. Consult an NRCS conservationist to determine if special circumstances (such as threats from invasive vegetation) require planting native vegetation.

Maintenance

Periodically inspect any water pipes or water control structures on the site for damage. Repair any damage promptly, and remove debris from pipe inlets and outlets as needed. If vegetative planting is involved, replanting may be needed until a good stand is established.

Relative Cost

Installation low — high

Maintenance low — high

Note: The cost of wetland restoration can vary greatly depending on the type and scope of restoration. Cost for both installation and maintenance can vary from low to high depending on the specific project.

For Additional Information...

Visit the Minnesota NRCS office online at <http://www.mn.nrcs.usda.gov/>, see the MN Job Sheet or the Field Office Technical Guide (FOTG) standard for (657) Wetland Restoration, or contact your local USDA-NRCS office

Local USDA-NRCS contact information